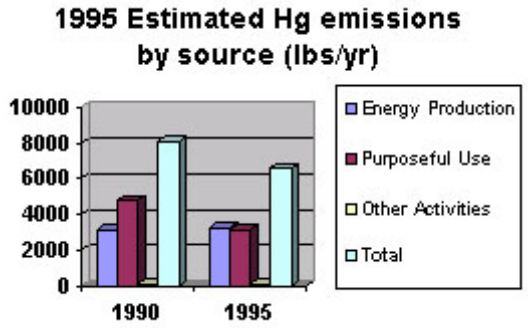
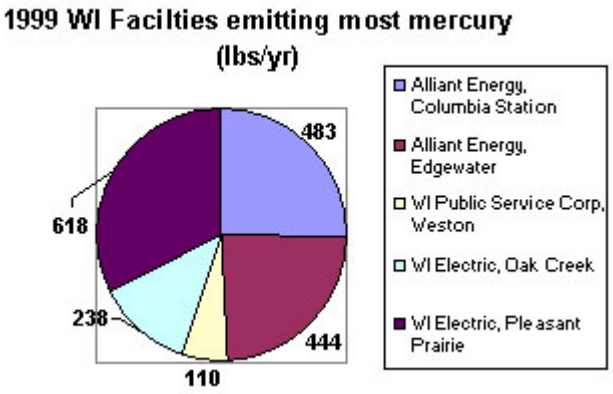
FACT SHEET: Wisconsin's proposed mercury emissions reduction rule

Mercury is a naturally-occurring element released in limited amounts when volcanoes erupt and rocks erode. The problem with mercury arises when man-made sources, such as coal-burning power plants, increase the amount of mercury released into the air. Wisconsin emitted 6,580 pounds of mercury in 1995. Nearly 40 percent of this came from coal-burning power plants. Mercury particles in emissions rise into the atmosphere where they bind with precipitation and fall back to earth. Through rain, snow, and drainage, mercury ends up in lakes and rivers. Once in the water, bacteria convert mercury into a form easily absorbed by fish and other organisms. For two decades, Wisconsin has issued advisories suggesting people limit the amount of fish they eat because regular consumption of mercury-contaminated fish may pose health risks. The number of waters covered by advisories has risen during this period, demonstrating the need to reduce man-made mercury sources

In May 2000, citizens and environmental groups concerned about increased fish consumption advisories and other environmental effects, petitioned the Wisconsin Department of Natural Resources to create rules requiring man-made sources to reduce their mercury emissions. In response, the DNR has drafted a set of efficient and economic emission reduction rules, keeping the petitioners desires in mind. The state has already initiated voluntary reduction programs with great success. This is the state's first potential regulatory effort regarding mercury emission reduction. Wisconsin hopes to be a leader in mercury emission reduction with a proposed 90 percent decrease within 15 years. It will take a long time for mercury cycling in fish, and other environmental systems, to drop down to natural background levels again. This is why the DNR wants to act now.





Who will be affected?

- Major Utilities (e.g., coal-burning power plants) must reduce emissions.
- Major stationary sources that emit more than 10 pounds of mercury annually (e.g., industrial boilers, waste incinerators, chlor-alkali plants), must not exceed established cap on emissions.
- Small sources encouraged to start voluntary reduction programs.

Reasons for the Rule

- Wisconsin citizens voiced their desires to reduce state mercury air emissions.
- To reduce the number of waterbodies with fish consumption advisories.
- To protect the health of humans and wildlife.
- To give major utilities a head start prior to national regulations.
- To serve as a leader to other states and the federal government so mercury can be reduced at a broader level.

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Key Features of the proposed rule

The proposed rules contain a phased mercury reduction schedule for major utilities covering a 15-year period. The proposed rules were developed to protect public and environmental health, to be cost-effective, reasonable and to not interfere with utilities' ability to supply the state with reliable energy.

The Planning Phase

2 years **– Baseline Determination**

Source owners/operators must provide baseline emissions to DNR for certification. Baseline is the average annual mercury emissions over a three-year period (1998-2000). Alternate years may be used if annual emissions during this time period are not representative. The rule will contain acceptable procedures for determining annual emissions.

3 years **- Certified Emission Reduction Registry**

Department has six months after submittal of baseline amounts to certify and determine accuracy. The DNR will keep original baselines in a registry and use it as comparison over the years in making reports on emission reduction project. The registry will contain information on banked certified mercury emission reductions. The DNR will update reduction progress and prepare annual reports on mercury registry and trading activity.

4 years – **Ceiling on Hg emissions**

Once certified by the DNR, the baseline submitted by utilities will become the ceiling on emissions for that operation. Future emissions can not exceed the ceiling. From the ceiling, emission reduction percentages will be determined over the fifteen-year rule process. In other words, the ceiling will drop by a certain percentage each year as rule is complied with.

– **Compliance Plans**.

Individual utilities must submit a plan for how they will comply with the rule. Compliance can be achieved by:

- Installing emission control technology such as carbon injection
- Changing fuels (e.g. from coal to natural gas) or modifying the process
- Getting emission reduction credits by participating in a mercury reduction project, such as a Clean Sweep program. Results can be applied to utilities total emission reductions.
- Corporate emission trading. If a utility over complies, exceeding the required percentage of reduction within a phase, it will be able to sell these credits to another facility that is having difficulty meeting the required reductions.

The Reduction Phase

5 years **– First reduction phase:** 30 percent reduction in baseline mercury emissions required.

6 years **– Evaluation Report.**

Report will examine feasibility of achieving last two reductions as well as studying rule implementation issues. Evaluations will be repeated after 11 years and anytime a federal rule is proposed. Reports will include:

- Evaluation of reduction requirements taking into consideration electric reliability, scientific and technology developments, multi-pollutant reduction approaches and federal regulatory activity
- Assessment of the impact of emissions trades on local water quality (i.e. hot spots from trading)
- Review of long term mercury storage and disposal practices
- Recommendation on the feasibility of achieving the ten year and fifteen year mercury reduction requirements
- Recommendations for corrective actions and rule revisions based on evaluation report findings.

10 years **– Second Reduction Phase:** 50 percent reduction required.

15 years **– Third reduction Phase**: 90 percent reduction required.

∗ **For more information**, contact Jon Heinrich, DNR Bureau of Air Management at:
267-7547
101 S. Webster St. Box 7921
Madison, WI 53707-7921
or visit
www.dnr.state.wi.us
(under topic: mercury)

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